

Software
HDR map-creation
application

PRICE
HDR Light Studio 1.5
Basic
• £149 / \$247 / €164
HDR Light Studio 1.5
Standard (reviewed)
• £299 / \$495 / €329
For other pricing options
please see the website

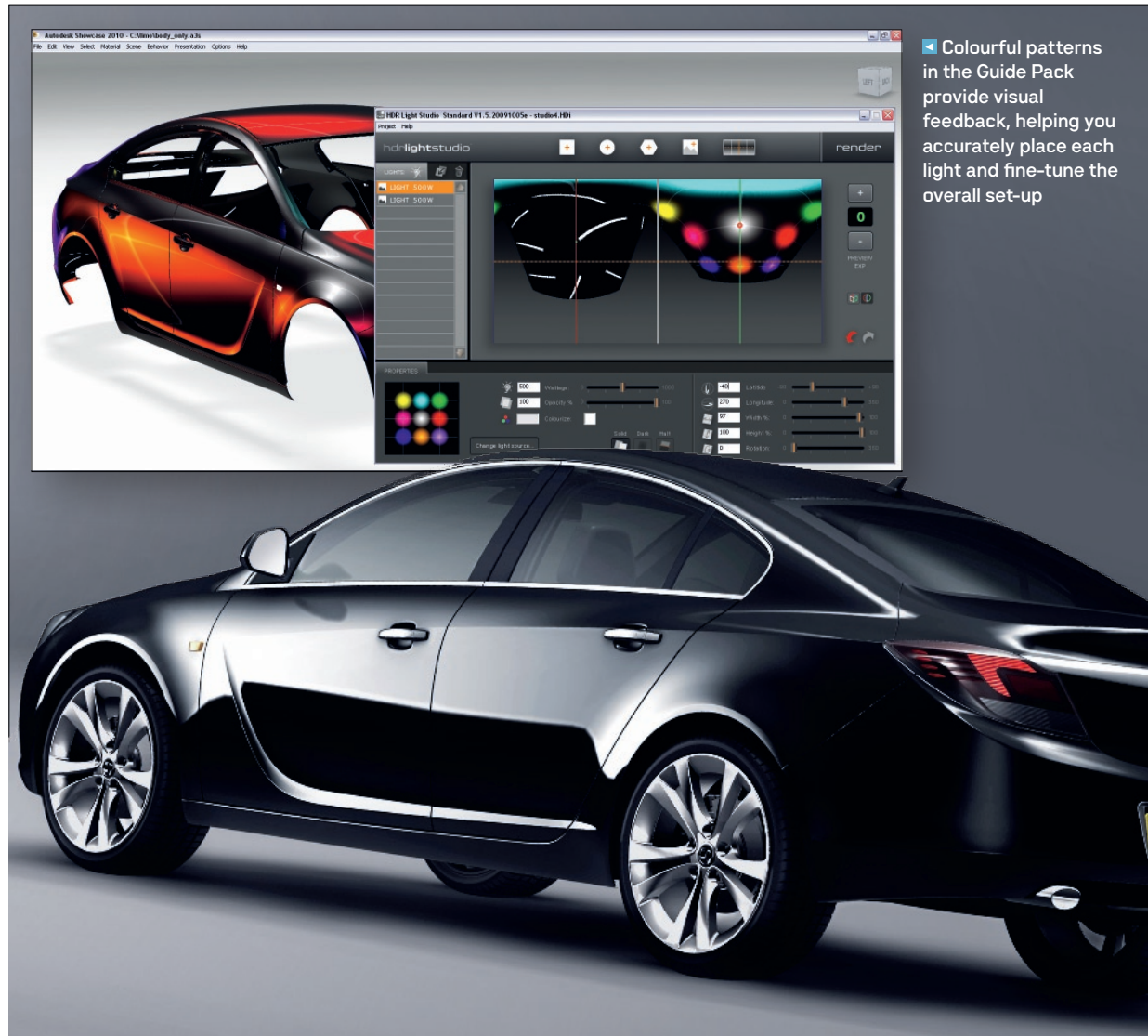
PLATFORM
Windows

MAIN FEATURES

- Lighting changes are previewed in real time
- All light sources have customisable attributes
- Light Packs provide a large library of different light sources
- Renders in minutes to .EXR or .HDR formats
- Light set-ups can be saved and revised later

DEVELOPER
Lightmap Ltd

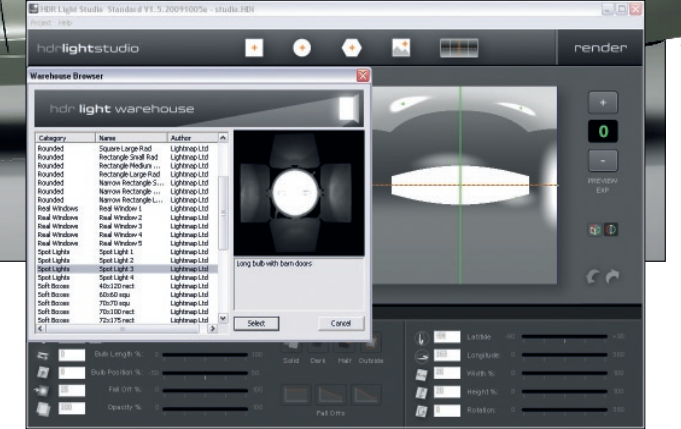
WEBSITE
hdrlightstudio.com



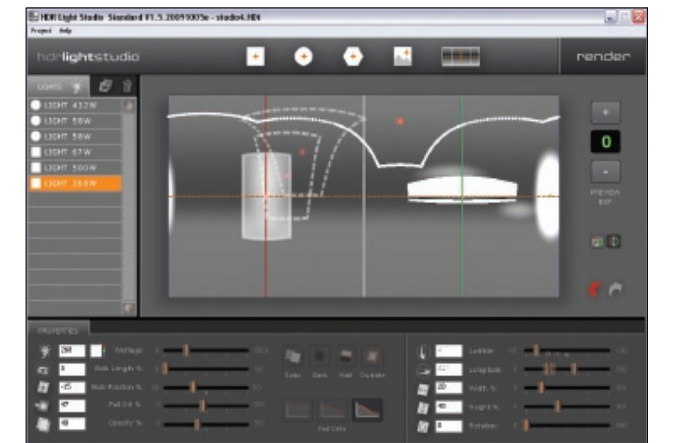
Colourful patterns in the Guide Pack provide visual feedback, helping you accurately place each light and fine-tune the overall set-up



The strength and focus of each light source can be individually altered, providing unlimited lighting conditions



New to v1.5 are Light Packs which include a library of light sources such as spot lamps, softboxes and naturally lit windows. Packs are viewed using the Light Warehouse browser



Over the course of a few commercial projects, the purchase cost would easily be recouped and as a piece of complimentary software to the usual 3D visualisation packages, HDR Light Studio should be top of the list of new purchases for designers and artists alike.

The shape of the light deformation is dependent on its position on the canvas. This distortion is cancelled out when applied as a spherical HDR environment

HDR Light Studio 1.5

Swapping his set of studio softboxes for Lightmap's latest HDR creation software, **Mark Pritchard** discovers whether this tool offers the true photographic approach to CG lighting it promises

Creatives such as architects, product and automotive designers rely heavily on visualisation software to present new design concepts to clients and share ideas with colleagues, and with the increase in computer hardware performance and the development of alternative rendering methods, users are now able to create presentable photorealistic renders of their concepts in hours rather than days.

Many photographers will argue that photography is all about light – perhaps even more importantly, the quality of light – and this is equally true with CG visualisation. Until the recent introduction of HDRIs (High Dynamic Range Images), setting up and lighting a CG scene was an iterative, if slightly experimental process with much of the time spent matching materials with artificial lights often producing less than perfect results.

HDRIs have managed to help simplify the lighting process. They contain a 360-degree view of a location, capturing all of its colour, as well as light intensities, to a greater depth than the naked eye can perceive, and when mapped to an environment they can realistically light objects and provide accurate reflection data. For this reason they have become very popular and there are now many resources from which to download or buy HDR images for use as environmental lighting. However, they still have one major disadvantage in that individual light intensities or positions contained within the map can't be easily edited.

Due to the nature of studio photography, where the placement and focus of lights is often very specific to the materials and form of your model, a generic studio HDR may not light your product in exactly the desired way. The only real alternative has

been to manipulate existing HDRIs or create your own in a Photoshop, which can be very difficult and cumbersome.

CLEVER LIGHT SOURCES

Lightmap, a newcomer to the visualisation market, has recognised this and developed HDR Light Studio, enabling users to create their own HDR images that replicate real-world photographic studio lighting set-ups.

Rather than drawing with pixels to create your lightmap, light sources are dragged from a library as vector objects onto a 2D blank canvas which previews the HDR as a flattened 360-degree environment. Cleverly, as the light sources are positioned further from the horizon line, they distort accordingly, so when mapping the HDR onto a sphere in the rendering software they actually maintain their intended shape. Thoughtfully, grid lines have been included on the preview to

help approximate where the horizon and opposing poles lie for both spherical and cubic lightmaps.

Once placed on the canvas, light attributes such as size, intensity, fall-off, colour and position can be simply adjusted using the slider controls or numeric values. Light sources can also be duplicated, layered or deleted, allowing the greatest flexibility possible whilst refining the lightmap, as well as using the exposure controls to monitor any shadow or highlight clipping. The beauty of HDR Light Studio is that it's object based and all the changes occur instantly in the preview canvas. It's only once the map layout is complete that the HDR needs to be rendered out to the desired resolution in either of the .EXR or .HDR formats – and even then, it only takes a few minutes.

FULL LIGHT CONTROL

With the release of v1.5, the first update since the software launched at the beginning of 2009, additional parameters have been included for further finite lighting control. Bulb length, Bulb position

and Opacity are quite self explanatory but very useful, and like most of the other attributes they are adjustable in value. Four new on/off toggles have also appeared that alter the fundamental behaviour of the light source: Outside, Half, Solid and Dark.

Perhaps most importantly in v1.5, HDR Light Studio now comes with a library of light sources that mimic most of the types of light sources you would find in a working studio. Windows, softboxes, bare lights, and lights with specialist modifiers are provided to help create the most popular lighting conditions, and a number of colour maps are included which are invaluable when working out reflective areas in a complicated scene.

Whilst it's not impossible to create HDR studio scenes in programs like Photoshop, HDR Light Studio provides the tools and flexibility with photographic understanding to quickly produce high-quality light maps with all the nuances that help to bring renders to life. Apart from a few user interface glitches and frustrations, such as working in a fixed window size and the inability to select lights via the preview window, it is well thought out and stable. Used alongside a 3D rendering package

"The beauty of Lightmap's HDR Light Studio is that it is object based and all the changes occur instantly in the preview canvas"

and Opacity are quite self explanatory but very useful, and like most of the other attributes they are adjustable in value. Four new on/off toggles have also appeared that alter the fundamental behaviour of the light source: Outside, Half, Solid and Dark.

The first three simply change the light falloff, symmetry, and layering characteristics respectively, with the Dark light switching a regular light source into an artificially negative one that reduces light. In practice this advanced control becomes extremely useful in controlling hotspots and unwanted spill from other lights as well as being able

which has the ability to automatically recognise any updates to an HDR image, it becomes a powerful partner in creating an efficient and logical lighting workflow.

HDR Light Studio comes in three different versions: Basic, Standard and Pro. The first two limit the maximum resolution of the final HDR map and Basic only supports a maximum of three light sources. Whilst all the versions are relatively inexpensive, the Pro version, which costs £499, still seems like very good value considering the benefits it provides to artists who regularly use HDR in their work. Here we reviewed the Standard edition.

3D VERDICT

PROS

- Simple to use
- Very fast
- Creates quality HDRIs

CONS

- Fixed window size
- Slight user-interface issues

A very useful, if not essential piece of software for those that regularly use HDR environments for lighting and reflections



About the author
Drive's Design Manager, Mark Pritchard has worked in the design industry for over 15 years helping some of the world's best known brands and designers shape and develop their new concepts
drivedesign.co.uk